PAPER

FILM TYPE AND MAP ON *CV.* HIMBO TOP RASPBERRY FRUIT QUALITY, COMPOSITION AND VOLATILES

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ABSTRACT

This study evaluates the effects of different MAP methods (active and passive) on the postharvest life of raspberry fruits using different plastic packaging films. In particular the comparison between biodegradable and conventional plastic films represent an important objective since not many studies are available on the effect of biodegradable films used for food packaging. Raspberry fruits were packaged using three different plastic films and were stored with different gas conditions for 24, 48, 72 and 96 hours. The gas concentration values of the boxes were monitored daily with a PBI Dansensor gas analyzer and expressed as percentages. Weight losses, skin color and qualitative and nutraceutical characteristics were monitored during the storage period to identify the best film-atmosphere combination for raspberry shelf life. Fruit volatile components were investigated. The results show that the evolution of the O_2 and CO_2 concentrations in the packed box was more influenced by the film characteristics rather than by the initial gas concentrations.

The best maintenance of qualitative characteristics and the lowest weight decrease over 96 hours was obtained by storing fruits under a biodegradable film.

- Keywords: raspberry, storage, packaging, MAP, quality, total phenolic compounds, antioxidant activity, anthocyanins, organic acid, ascorbic acid, postharvest -